

STATE OF CALIFORNIA
NATURAL RESOURCES AGENCY
DEPARTMENT OF FISH AND WILDLIFE

STEELHEAD REPORT AND RESTORATION CARD PROGRAM
Report to the Legislature 2015-2019



June 2021

EXECUTIVE SUMMARY

The purpose of the California Department of Fish and Wildlife's Steelhead Report and Restoration Card is to gather angler data which is used by the Department in making management and regulatory decisions. Revenue generated from report card sales is dedicated to administering the program and funding projects that contribute to the conservation, monitoring, or recovery of steelhead populations. This report summarizes angler information gathered by the Department from 2015 to 2019.

Between 2015 and 2019 a total of 248,954 cards were sold, generating \$1,608,245.75 in revenue. The Report Card Program used \$1,056,611 in revenue to fund 20 projects that directly or indirectly benefited steelhead and steelhead anglers.

Although anglers are mandated by law to return their report cards by January 31, only a small percentage (35.27%) were received. The trend of low returns has been consistent with the previous five-year return rate of 32.45%.

Anglers reported making 191,085 trips and reported catching 155,289 steelhead. Anglers averaged 38,217 trips per year, which is a decrease from the prior five-year average of 52,378 trips. Anglers averaged 0.81 steelhead per trip, which is also lower than the previous five-year average of 0.90. Anglers reported a harvest rate of 25.6% of hatchery origin steelhead, which compares similarly to the previous five-year average of 26.8%. The majority of steelhead fishing took place in the Trinity River (17.8%), followed by the Klamath River (14.6%), American River (9.8%), and Russian River (9.4%). Seventy-one percent of the steelhead caught were wild origin.

The detail of the Report Card Program is outlined in the 2021 California Fish and Game Code in Division 6, Part 2, Chapter 2, Article 6. Steelhead Trout (Sections 7380-7382), which states that the program shall become inoperative on July 1, 2022, and as of January 1, 2023, is repealed, unless a later enacted statute that is enacted deletes or extends the dates on which it becomes inoperative and is repealed. The Department recommends that Article 6. Steelhead Trout [7380-7382] remain operative.

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INTRODUCTION

Pursuant to State legislation (AB 2187), the California Fish and Game Commission implemented the Steelhead Trout Report and Restoration Card Program (Report Card) in 1991. AB 2187 established Fish and Game Code Sections 7380 and 7381 requiring anglers fishing for steelhead in anadromous waters to: purchase a Report Card; record their fishing information; and return their catch information to the Department during the designated reporting period, January 1st through 31st, of the following calendar year. Anglers are required to record the date and location where they are fishing, any adult steelhead kept or released, as well as the number of hours fished. See Appendix A, Figure 1, for an example of the Report Card.

Section 7381 states that revenue generated from the sale of the Report Card may be expended only to monitor, restore, or enhance steelhead trout resources and to administer the Report Card Program. Eligible project types include: enforcement and protection, fish passage at stream crossings, instream barrier modification for fish passage, instream habitat restoration, riparian restoration, instream bank stabilization, monitoring status and trends, monitoring watershed restoration, project design, watershed evaluation, fish screening at diversions, private sector technical training, water conservation measures, and water measuring devices.

Section 7381 requires the Department to submit a report to the legislature regarding projects undertaken funded by the Report Card, derived benefits of funded restoration projects, and its recommendations for revising the Report Card requirement, if any. This report summarizes Report Card activities from 2015 through 2019.

STEELHEAD STATUS

Anadromous rainbow trout (*Oncorhynchus mykiss*), otherwise known as steelhead, are an important biological, economical, and recreational resource throughout the Western Pacific states (Groot and Margolis 1991). Within California, steelhead populations range from the Oregon border south to Baja California. Despite being widespread, most populations within California are declining (61 FR 41541; Moyle 2002).

The National Marine Fisheries Service organizes species into management units for the purpose of listing or delisting fishes under the federal Endangered Species Act (ESA). The management unit for steelhead is the Distinct Population Segment (DPS) which groups populations that are substantially reproductively isolated from other populations and represent an important component in the evolutionary legacy of the species (56 FR 58612). There are six steelhead DPS's in California—Northern California (65 FR 36074), Central California Coast (62 FR 43937), Central Valley (63 FR 13347), and South-Central California Coast (62 FR 43937) are listed as threatened under the ESA and the Southern California DPS (62 FR 43937) is listed as endangered (Figure 1). The Klamath Mountains Province DPS is not listed (62 FR 43937). The Klamath Mountains Province DPS is the only steelhead DPS in California that is not warranted for federal listing (71 FR 833).

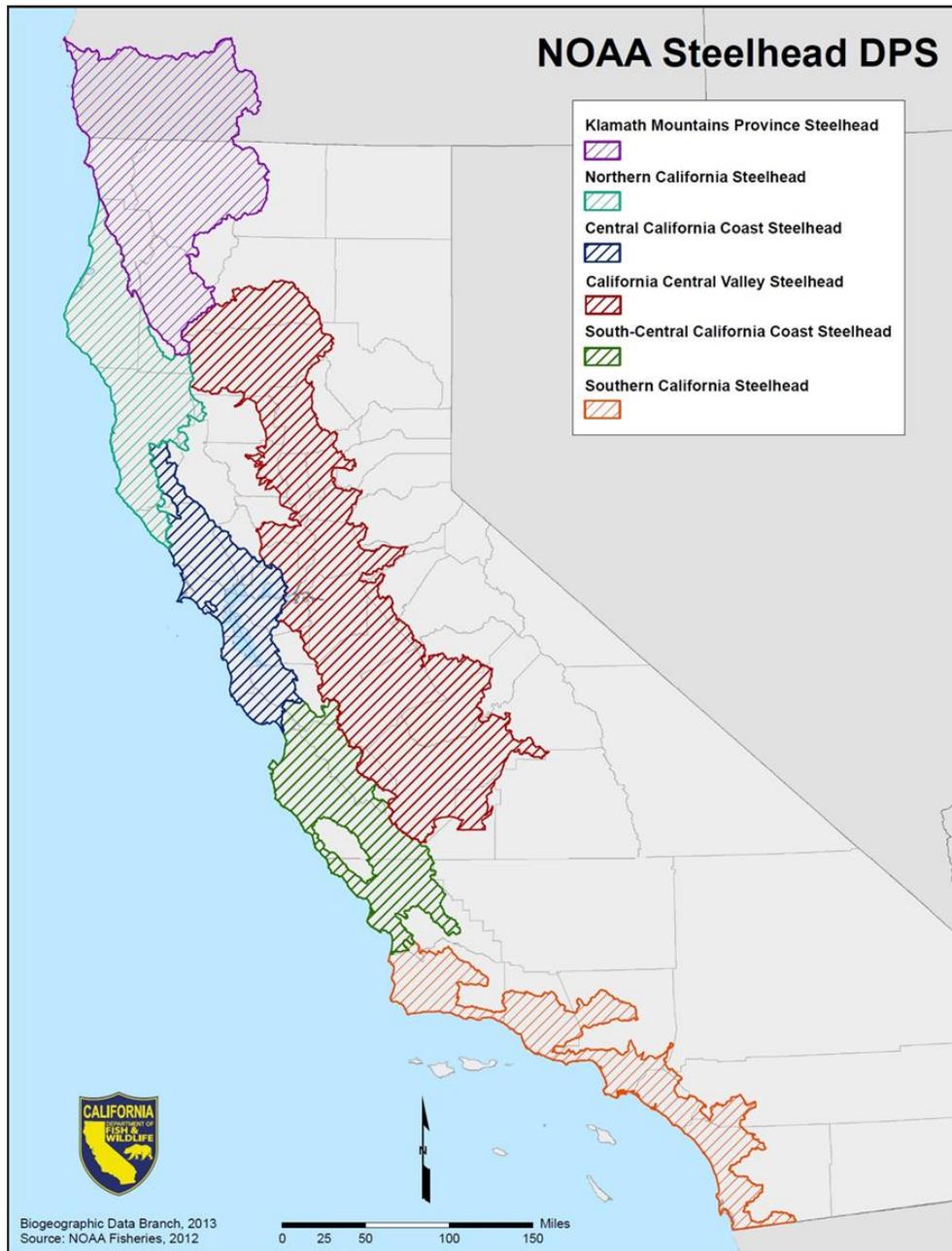


Figure 1. Steelhead distinct population segments within California as delineated by National Oceanic Atmospheric Administration.

REPORT CARD SIMPLIFICATION

The Department reevaluated the fisheries management objectives of the Report Card to better accommodate the angling community after expressing the Report Card was too extensive and complex to fill out. The Department concluded that similar analysis could be made if location codes were consolidated from 73 to 20 (Figure 2). The location code reduction was applied in 2016.

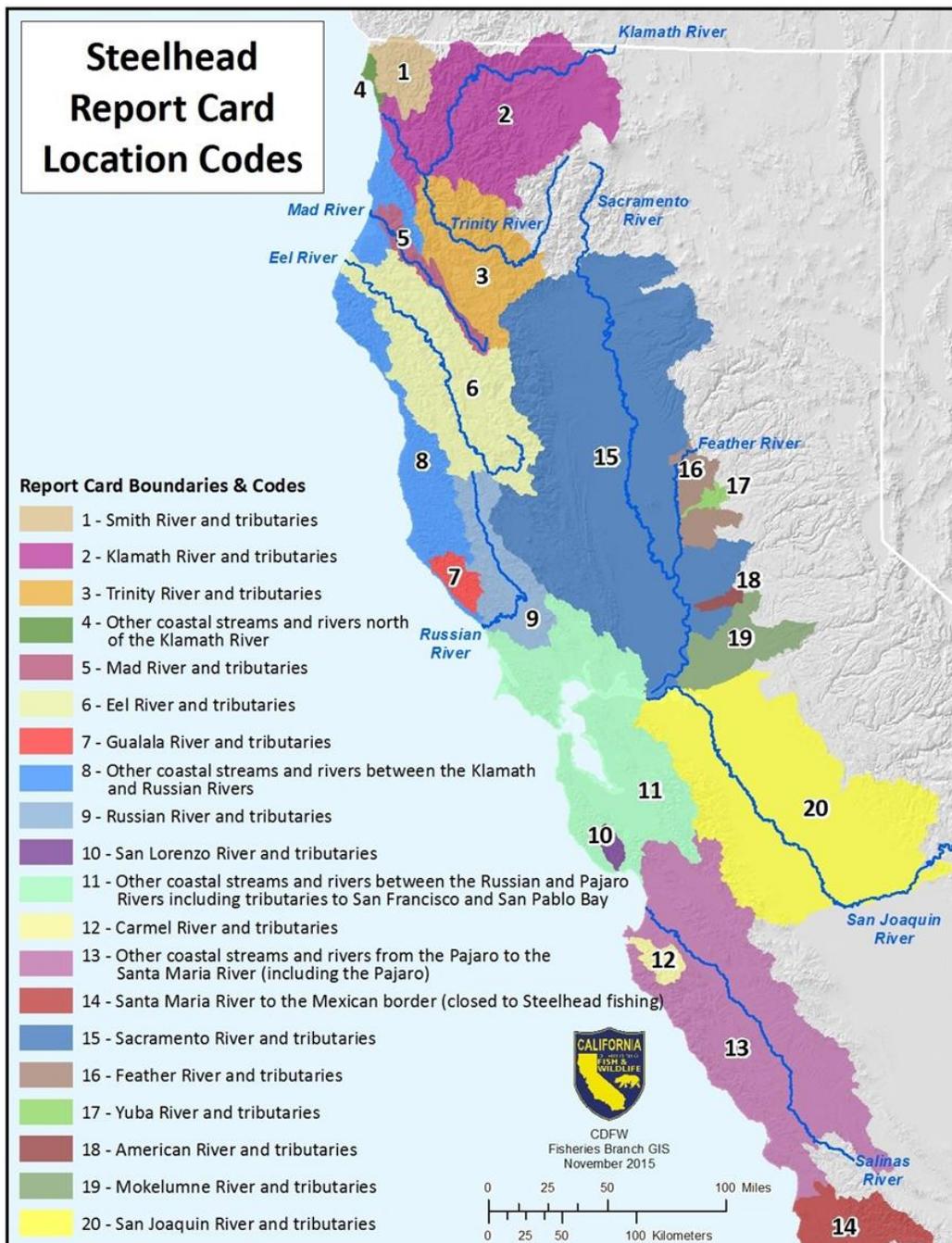


Figure 2. Spatial representation and description of Report Card location codes.

REPORTING

The quantity and quality of the steelhead catch-and-harvest data the Department gains from the Report Card is dependent on anglers returning their cards. Although anglers are mandated by law to report their angling data by January 31st of the following year, only a small percentage comply with this requirement (approximately 35%). From 2015 to 2019 a total of 248,954 Report Cards were sold and 87,817 Report Cards were returned to the Department (Table 1). The annual number of Report Cards sold ranged from 43,047 to 53,592, averaging approximately 50,000, which is a slight decrease compared to the previous five-year average of approximately 54,000. Online Report Card returns

increased each year with an average of seventy-four percent of all returned Report Cards coming from online returns (Table 1).

Table 1. The total number of Report Cards reported to the Department from 2015 through 2019.

Year	Total Report Cards Sold	Total Reported	Reported Online
2015	53,592	17,365 (32%)	10,144 (58%)
2016	52,208	19,089 (37%)	13,778 (72%)
2017	43,047	16,664 (39%)	12,797 (77%)
2018	50,313	17,871 (36%)	14,124 (79%)
2019	49,794	16,828 (34%)	14,353 (85%)
Grand Totals	248,954	87,817 (35%)	65,196 (74%)

REVENUE

REPORT CARD COST

Report Cards sold between 2015 to 2019 generated \$1,608,245 in revenue. Annual revenue ranged from a low of \$273,059 in 2017 to a high of \$341,256 in 2015. The annual cost of a Report Card from 2015 through 2018 was \$6.50 and increased to \$7.00 in 2019. The cost of the Report Card adjusts in response to the Implicit Price Deflator (IPD) which measures economic inflation experienced by consumers. Fluctuation of the IPD accounts for why Report Card Program revenue may increase when Report Card sales have not.

GRANTABLE FUNDS

To increase efficiency and transparency within Department programs, starting in 2012 the Department established a Proposal Solicitation Notice (PSN) within the Fisheries Restoration Grants Program (FRGP). The Report Card Program established a Steelhead Report and Restoration Card Focus within the FRGP PSN to provide administrative, technical, and public review for awarding grantable funds (see Appendix B for an example of the Steelhead Report and Restoration Card Focus). Entities eligible to submit project proposals include public agencies, Native American Indian Tribes, and registered nonprofit organizations.

The Department considers the scientific merit, feasibility, and opinion of the Public when scoring proposed restoration projects. Therefore, when determining which proposals will be awarded funding, the Department makes its decision based upon the combination of the proposal review scores and comments from the Technical Review Team (TRT), and the California Advisory Committee on Salmon and Steelhead Trout (Advisory Committee).

Both the TRT and the Advisory Committee serve important functions and play a role when making recommendations to Department leadership. The practice of considering both the technical merit and the opinion of the Public (i.e. Advisory Committee) for proposed projects is used by all grant programs involving habitat restoration for the Department.

PROJECTS FUNDED BY REPORT CARD REVENUE

Each fiscal year, there was approximately \$200,000 distributed to fund steelhead restoration projects located within anadromous watersheds. Proposed projects were required to address direct or indirect benefits to both steelhead and anglers. From 2015 through 2019, 20 projects were funded using Report Card Program revenue totaling approximately \$1,056,600 (See Table 2).

Table 2. Restoration projects funded by the Report Card Program between years 2015 through 2019.

Project Name	Year	Amount
Upper Rancheria Creek Instream Habitat Enhancement Project	2015	\$32,128
Redwood Creek DIDSON 2015-2017	2015	\$27,241
Big Sur River Fish Passage Restoration Project- Riverside Campground	2015	\$33,504
Big Sur River Fish Passage Restoration Project- Riverside Campground	2015	\$108,838
Steelhead Population Monitoring for the Gualala River Watershed	2016	\$161,219
Woodman Creek Creel (Eel River) Railroad Crossing Fish Passage	2016	\$60,200
Pinole Creek Fish Passage Improvement Project	2016	\$189,563
Genetic Structure of Mad River Steelhead: hatchery genetic monitoring and evaluation of summer run status	2016	\$100,879
SRF Steelhead Summit and Water Conservation Workshop	2017	\$17,609
Instream Flow Study for Sonoma Creek Steelhead	2017	\$25,000
Woodman Creek Creel (Eel River) Railroad Crossing Fish Passage	2017	\$50,000
Supply Creek Restoration Project Phase II	2017	\$40,000
Mid-Klamath Tributary Fish Passage Improvement Project	2017	\$40,000
Yellow Jacket Creek Fish Passage Improvement Project	2017	\$30,000
Powers Creek Fish Habitat Restoration Project	2017	\$19,098
Rowdy Creek Instream Habitat Enhancement Project Reach III	2017	\$10,000
South Fork Eel River Adult Steelhead Monitoring Project	2018	\$62,557
North Cow Creek Fish Barrier Removal (BVWD)	2018	\$2,856
South Fork Eel River Adult Steelhead Monitoring Project	2019	\$44,542
North Cow Creek Fish Barrier Removal (BVWD)	2019	\$1,378

ANGLING DATA

Anglers reported taking 191,085 trips to fish for steelhead and reported catching 155,289 steelhead. Of the 155,289 steelhead caught, 110,448 were of wild-origin (WO) and 44,841 were of hatchery-origin (HO) (Table 3). Of the 44,841 HO steelhead, 33,379 were released (Table 3). Anglers averaged 38,217 trips per year, which is a decrease from the prior five-year average of 52,378 trips. Anglers averaged 0.81 steelhead per trip, which is also lower than the previous five-year average of 0.90. Anglers reported a harvest rate of 25.6% of hatchery origin steelhead, which is similar to the previous

five-year average of 26.8%. The data evaluated by location code indicated a majority of the fishing took place in the Trinity River (17.8%); followed by, the Klamath River (14.6%), American River (9.8%), Russian River (9.4%), Sacramento River (8.8%), Smith River (8.8%), Feather River (6.6%), and the Mad River (6.3%) (Table 4).

Table 3. The number of steelhead by origin and number of trips reported between 2015 and 2019

Year	Number of Trips	Wild Released	Hatchery Kept	Hatchery Released
2015	43,741	24,882	3,004	7,292
2016	29,985	14,123	1,199	3,932
2017	41,161	22,159	2,843	8,145
2018	41,604	27,199	2,575	7,751
2019	34,594	22,085	1,841	6,259
Total	191,085	110,448	11,462	33,379

Table 4. The total number of reported fishing trips taken to each location code between 2015 and 2019. Note: No Report Card data was recorded in Location 14, Santa Maria River to Mexican Border, because fishing is closed at this location.

Location Code	River System	Number of Trips Taken
1	Smith River	16,784 (8.8%)
2	Klamath River	27,911 (14.6%)
3	Trinity River	34,005 (17.8%)
4	Other North of Klamath	755 (0.4%)
5	Mad River	12,077 (6.3%)
6	Eel River	8,244 (4.3%)
7	Gualala River	1,950 (1.0%)
8	Other Klamath-Russian River	7,871 (4.1%)
9	Russian River	17,925 (9.4%)
10	San Lorenzo River	2,931 (1.5%)
11	Other Russian-Pajaro River	2,265 (1.2%)
12	Carmel River	375 (0.2%)
13	Other Pajaro-Santa Maria River	1,006 (0.5%)
15	Sacramento River	16,876 (8.8%)
16	Feather River	12,557 (6.6%)
17	Yuba River	4,408 (2.3%)
18	American River	18,647 (9.8%)
19	Mokelumne River	2,503 (1.3%)
20	San Joaquin River	1,708 (0.9%)

Within the locations where the most fishing took place; the Trinity River reported 28,315 steelhead caught (60.6% WO), the Klamath River reported 44,609 steelhead caught (88.8% WO), the American River reported 9,040 steelhead caught (31.2% WO), the Russian River reported 4,961 steelhead caught (30.1% WO), the Sacramento River reported 20,501 steelhead caught (77.6% WO), the Smith

River reported 8,831 steelhead caught (89.2%), the Feather River reported 14,403 steelhead caught (44.3% WO), and the Mad River reported 5,297 steelhead caught (39.7% WO) (Figure 3; Appendix C, Table 1).

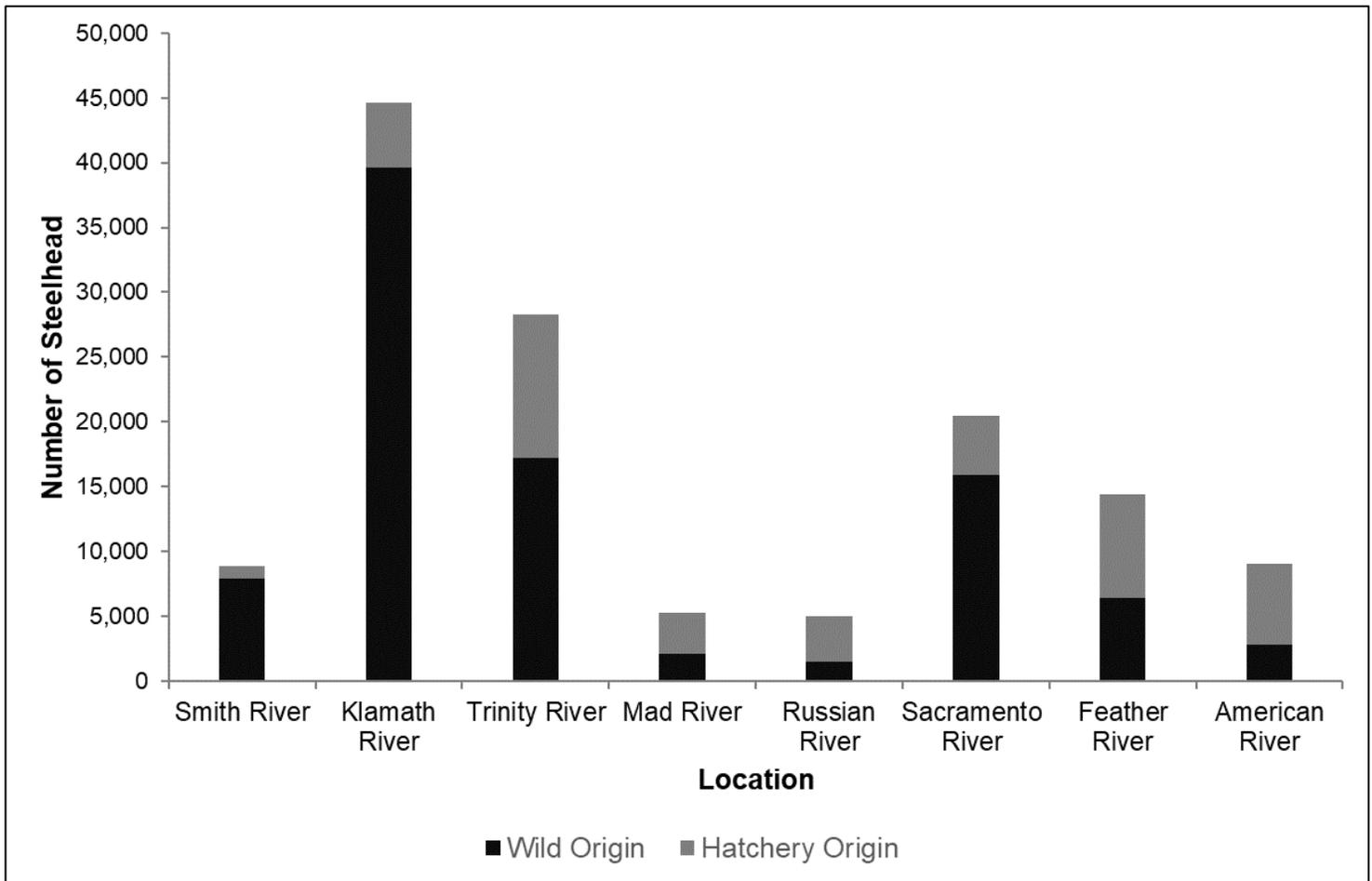


Figure 3. The number of wild origin and hatchery origin steelhead captured for locations with highest trips taken. Only locations with at least 6% of the overall trips were included. For information on other locations see Appendix C Table 1.

Among all locations the average harvest rate for hatchery steelhead was 25.6%. The highest harvest rate locations were the Russian River (61.5%), Mad River (47.6%), other rivers and streams between the Russian River and Pajaro River including tributaries to the San Francisco and San Pablo Bay (45.7%), Smith River (41.2%), and other rivers and streams north of the Klamath River (34.6%) (Figure 4).

Among all location codes the average reported catch per trip was 0.8. The highest reported catch per trip rates were the Klamath River (1.57), Sacramento River (1.22), Feather River (1.09), Mokelumne River (1.09), and the Trinity River (0.82) (Figure 4).

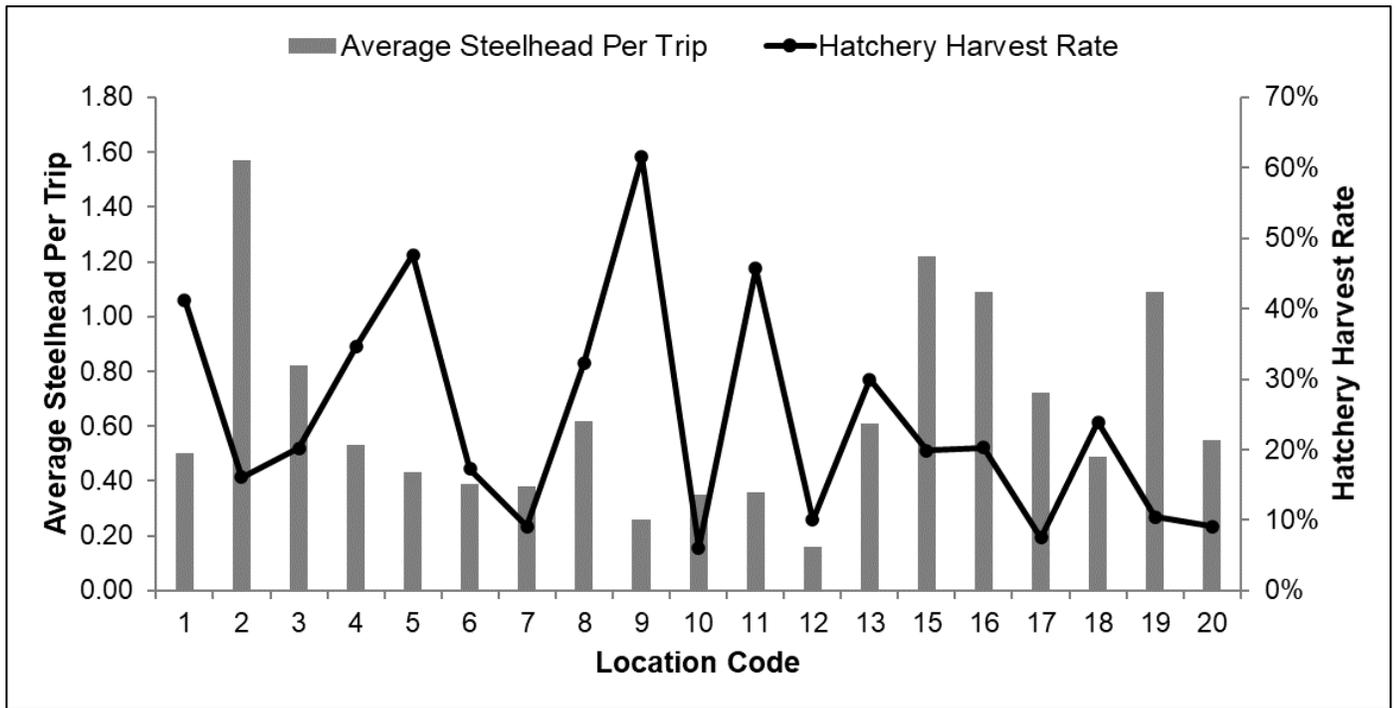


Figure 4. The average steelhead caught per trip and hatchery origin harvest rate by location code from 2015 to 2019. Note: Location code 14 is excluded because that location is closed to fishing.

It should be noted that all angling data is only representative of the 35% of returned report cards and a large amount of fishing trips was not accounted for because of the low return rate. With the low return rate, unreported catch or effort could lead to biased estimates of actual catch per trip averages. Trends depicted by Report Card data cannot be used to determine a scientifically defensible population status increase. Instead, trends indicated through Report Card data may suggest additional scientifically defensible studies may be warranted to answer questions within specific watersheds. However, given the sufficient sample size of returned cards the proportion of trips by location code, hatchery harvest rates, and proportion of hatchery to wild steelhead in each location code are likely valid representations.

BENEFITS OF THE REPORT CARD PROGRAM

The Report Card Program provides the Department with information to aid in making fisheries management and regulatory decisions. By purchasing a Report Card and participating in the reporting process, steelhead anglers directly influence the way in which steelhead resources of the state are managed.

For example, analysis of Report Card data has been used to show that HO steelhead stray into rivers managed as WO streams absent of hatchery operations. To reduce the deleterious effect of hatchery genetics on wild populations, stream-specific take limits were standardized, increasing daily bag and possession limits of HO steelhead, state-wide. The Report Card Program also makes historical data available to state and federal agencies, non-government agencies, and the general public. Requests for Report Card data can be submitted directly to the Program Coordinator, or through a formal request for public records.

Prior to the implementation of the Report Card Program in 1993, steelhead seldom received funding for habitat restoration and monitoring projects contributing to the conservation and recovery of the species. Report Card Program revenue is dedicated, in part, to funding steelhead-centric restoration projects throughout California.

Report Card revenue has been used to fund:

- Modification and removal of barriers, improving fish passage.
- Screening of diversions, protecting emigrating juvenile steelhead.
- Restoration of instream habitat, including the addition of large-woody structures, resulting in the sorting of spawning gravels, stabilization of stream banks, and increasing the frequency and depth of pools.
- Stabilization of eroding streambanks.
- Monitoring of individual populations, providing baseline and trend data to assist recovery efforts.
- Watershed education to the public and school districts.

RECOMMENDATIONS

The status of the Report Card Program is outlined in the 2021 California Fish and Game Code in Division 6, Part 2, Chapter 2, Article 6. Steelhead Trout (Sections 7380-7382), which states that the program shall become inoperative on July 1, 2022, and as of January 1, 2023, is repealed, unless a later enacted statute that is enacted deletes or extends the dates on which it becomes inoperative and is repealed. The Department recommends that Article 6. Steelhead Trout [7380-7382] remain operative.

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APPENDICES

APPENDIX B: Report Card Focus

Steelhead Report and Restoration Card (SHRRC) Focus

The SHRRC program is an entity of the Department's Fisheries Branch and concentrates solely on funding steelhead centric projects located within anadromous coastal and inland watersheds having a specific location code linked to the SHRRC. Any watershed within a delineated location code is eligible for funding (See Table 1). Only projects below barriers impeding anadromy can be funded.

Projects submitted under this Focus cannot exceed two years. Proposals submitted under the SHRRC Focus are required to address benefits (direct or indirect) to anglers.

Proposals submitted for SHRRC Focus consideration are required to follow all the requirements set out in the PSN. Evaluation of the proposals will follow the PSN process and timeline. Technical review will be facilitated by the SHRRC Program Coordinator. Technical experts will be identified based on knowledge of the steelhead species as well as the watershed within the proposed project area. If a proposal passes the SHRRC technical review phase, proposals will receive peer review by the California Advisory Committee on Salmon and Steelhead Trout's steelhead subcommittee.

For questions regarding the SHRRC Focus, contact Daniel Martinez at Daniel.Martinez@wildlife.ca.gov.

Objectives of the SHRRC program

The primary objectives of the SHRRC program are to:

- Restore watershed processes and functions, modify or remove barriers to migration, protect and restore steelhead instream habitat, as well as to increase long-term effectiveness of restoration efforts by monitoring and maintaining projects.
- Encourage local government and community-based partnerships through the support of watershed organizations and cooperative efforts.
- Identify watershed priorities and restoration projects through evaluation and planning.
- Support watershed education, technical workshops, and conferences.

Proposals submitted for SHRRC Focus consideration must address at least one of the programs objectives and comply with the focus criteria listed below.

SHRRC Focus Criteria

The four criteria for the SHRRC Focus are listed below. All four criteria must be met for a proposal to be accepted for consideration under the SHRRC Focus.

1. Species Criteria:

- Steelhead

2. Geographic Criteria:

Projects located within watersheds covered by the SHRRC location codes are eligible for funding (see Table 1). Projects must be located below anadromous barriers.

3. Project Type Criteria: Only one project type per proposal may be selected and only from the list below.

- EF Enforcement and Protection
- FP Fish Passage at Stream Crossings
- HB Instream Barrier Modification for Fish Passage
- HI Instream Habitat Restoration
- HR Riparian Restoration
- HS Instream Bank Stabilization
- MD Monitoring Status and Trends
 - MD projects eligible for consideration under the SHRRC focus are limited to baseline monitoring intended to measure existing conditions of salmonid habitat, watershed processes, and/or populations. Please see MD description for more information regarding baseline project types.
- MO Monitoring Watershed Restoration
- PD Project Design
- PL Watershed Evaluation, Assessment, and Planning
- SC Fish Screening of Diversions
- TE Private Sector Technical Training
- WC Water Conservation Measures
- WD Water Measuring Devices (Instream and Water Diversion)

4. Angler Benefit:

Proposals for SHRRC funds submitted through this PSN are required to address how the project will benefit anglers (directly or indirectly). Enter "Angler Benefit" when asked for "Task Number" on the application in place of a recovery task. In addition, the applicant must explain how the proposal meets the angler benefit criteria and the SHRRC objectives in the Objectives Section of the Project Description.

APPENDIX C: Angling Data

Table 1. All steelhead catch and recorded trips within the Smith River & Tributaries location code from 2015 to 2019.

Year	Wild Released	Hatchery Kept	Hatchery Released	Total Steelhead	Total Trips	Total Hours	Average Hours per Trip	Average Steelhead per Trip
2015	2,535	156	189	2,880	4,375	18,843	4.31	0.66
2016	2,288	117	175	2,580	4,463	20,065	4.50	0.58
2017	948	44	67	1,059	2,748	11,022	4.01	0.39
2018	1,026	48	64	1,138	2,842	11,282	3.97	0.40
2019	1,078	29	67	1,174	2,356	9,747	4.14	0.50
2015-2019	7,875	394	562	8,831	16,784	70,959	4.23	0.53

Table 2. All steelhead catch and recorded trips within the Klamath River & Tributaries location code from 2015 to 2019.

Year	Wild Released	Hatchery Kept	Hatchery Released	Total Steelhead	Total Trips	Total Hours	Average Hours per Trip	Average Steelhead per Trip
2015	7,962	292	766	9,020	6,743	31,133	4.62	1.34
2016	3,245	132	544	3,921	4,382	20,212	4.61	0.89
2017	6,812	115	789	7,716	4,530	20,869	4.61	1.70
2018	12,128	147	1,208	13,483	5,944	26,167	4.40	2.27
2019	9,446	119	904	10,469	6,312	28,439	4.51	1.66
2015-2019	39,593	805	4,211	44,609	27,911	126,820	4.54	1.60

Table 3. All steelhead catch and recorded trips within the Trinity River & Tributaries location code from 2015-2019.

Year	Wild Released	Hatchery Kept	Hatchery Released	Total Steelhead	Total Trips	Total Hours	Average Hours per Trip	Average Steelhead per Trip
2015	4,657	854	2,948	8,459	8,267	41,656	5.04	1.02
2016	2,144	274	1,144	3,562	6,134	31,035	5.06	0.58
2017	3,559	542	2,260	6,361	7,283	34,556	4.74	0.87
2018	3,722	362	1,447	5,531	6,884	32,091	4.66	0.80
2019	3,094	223	1,085	4,402	5,437	24,777	4.56	0.81
2015-2019	17,176	2,255	8,884	28,315	34,005	164,115	4.83	0.83

Table 4. All steelhead catch and recorded trips within the Other North of the Klamath River location code from 2015-2019.

Year	Wild Released	Hatchery Kept	Hatchery Released	Total Steelhead	Total Trips	Total Hours	Average Hours per Trip	Average Steelhead per Trip
2015	88	9	4	101	176	774	4.40	0.57
2016	3	4	1	8	108	394	3.65	0.07
2017	52	7	10	69	172	520	3.02	0.40
2018	78	6	31	115	147	465	3.16	0.78
2019	120	1	5	126	152	348	2.29	0.83
2015-2019	341	27	51	419	755	2,501	3.31	0.55

Table 5. All steelhead catch and recorded trips within the Mad River & Tributaries location code from 2015-2019.

Year	Wild Released	Hatchery Kept	Hatchery Released	Total Steelhead	Total Trips	Total Hours	Average Hours per Trip	Average Steelhead per Trip
2015	577	542	605	1,724	2,728	10,659	3.91	0.63
2016	225	195	229	649	1,671	5,915	3.54	0.39
2017	607	273	301	1,181	2,974	10,398	3.50	0.40
2018	432	237	235	904	2,639	9,293	3.52	0.34
2019	261	274	304	839	2,065	7,175	3.47	0.41
2015-2019	2,102	1,521	1,674	5,297	12,077	43,440	3.60	0.44

Table 6. All steelhead catch and recorded trips within the Eel River & Tributaries location code from 2015-2019.

Year	Wild Released	Hatchery Kept	Hatchery Released	Total Steelhead	Total Trips	Total Hours	Average Hours per Trip	Average Steelhead per Trip
2015	591	17	35	643	1,652	7,322	4.43	0.39
2016	297	2	16	315	1,116	4,739	4.25	0.28
2017	920	5	41	966	2,184	9,393	4.30	0.44
2018	883	3	34	920	1,998	8,986	4.50	0.46
2019	484	4	23	511	1,294	5,558	4.30	0.39
2015-2019	3,175	31	149	3,355	8,244	35,998	4.37	0.41

Table 7. All steelhead catch and recorded trips within the Gualala River & Tributaries location code from 2015-2019.

Year	Wild Released	Hatchery Kept	Hatchery Released	Total Steelhead	Total Trips	Total Hours	Average Hours per Trip	Average Steelhead per Trip
2015	93	0	10	103	402	1,686	4.19	0.26
2016	126	0	1	127	463	1,918	4.14	0.27
2017	119	1	6	126	313	1,434	4.58	0.40
2018	121	1	5	127	349	1,480	4.24	0.36
2019	252	1	8	261	423	1,980	4.68	0.62
2015-2019	711	3	30	744	1,950	8,498	4.36	0.38

Table 8. All steelhead catch and recorded trips within the Other between Klamath and Russian River location code from 2015-2019.

Year	Wild Released	Hatchery Kept	Hatchery Released	Total Steelhead	Total Trips	Total Hours	Average Hours per Trip	Average Steelhead per Trip
2015	953	19	29	1,001	2,043	8,758	4.29	0.49
2016	729	8	9	746	1,486	6,255	4.21	0.50
2017	885	9	13	907	1,373	6,048	4.40	0.66
2018	894	8	12	914	1,420	6,252	4.40	0.64
2019	1,231	6	42	1,279	1,549	7,069	4.56	0.83
2015-2019	4,692	50	105	4,847	7,871	34,382	4.37	0.62

Table 9. All steelhead catch and recorded trips within the Russian River & Tributaries location code from 2015-2019.

Year	Wild Released	Hatchery Kept	Hatchery Released	Total Steelhead	Total Trips	Total Hours	Average Hours per Trip	Average Steelhead per Trip
2015	275	510	317	1,102	4,048	15,588	3.85	0.27
2016	60	89	137	286	1,550	5,325	3.44	0.18
2017	515	708	379	1,602	5,231	19,998	3.82	0.31
2018	481	676	384	1,541	5,111	19,717	3.86	0.30
2019	161	151	118	430	1,985	6,800	3.43	0.22
2015-2019	1,492	2,134	1,335	4,961	17,925	67,428	3.76	0.28

Table 10. All steelhead catch and recorded trips within the San Lorenzo River & Tributaries location code from 2015-2019.

Year	Wild Released	Hatchery Kept	Hatchery Released	Total Steelhead	Total Trips	Total Hours	Average Hours per Trip	Average Steelhead per Trip
2015	46	2	37	85	536	1,972	3.68	0.16
2016	122	1	36	159	506	1,660	3.28	0.31
2017	228	2	60	290	582	2,104	3.62	0.50
2018	258	2	33	293	624	2,295	3.68	0.47
2019	183	6	35	224	683	2,349	3.44	0.33
2015-2019	837	13	201	1,051	2,931	10,380	3.54	0.36

Table 11. All steelhead catch and recorded trips within the Other between Russian and Pajaro Rivers location code from 2015-2019.

Year	Wild Released	Hatchery Kept	Hatchery Released	Total Steelhead	Total Trips	Total Hours	Average Hours per Trip	Average Steelhead per Trip
2015	101	16	5	122	413	1,256	3.04	0.30
2016	85	0	3	88	397	1,351	3.40	0.22
2017	227	6	18	251	454	1,556	3.43	0.55
2018	147	8	23	178	414	1,330	3.21	0.43
2019	160	18	8	186	587	1,996	3.40	0.32
2015-2019	720	48	57	825	2,265	7,489	3.31	0.36

Table 12. All steelhead catch and recorded trips within the Carmel River & Tributaries location code from 2015-2019.

Year	Wild Released	Hatchery Kept	Hatchery Released	Total Steelhead	Total Trips	Total Hours	Average Hours per Trip	Average Steelhead per Trip
2015	9	0	5	14	59	146	2.47	0.24
2016	5	1	0	6	114	262	2.30	0.05
2017	8	0	2	10	55	153	2.78	0.18
2018	6	0	2	8	37	113	3.05	0.22
2019	14	0	0	14	110	347	3.15	0.13
2015-2019	42	1	9	52	375	1,021	2.72	0.14

Table 13. All steelhead catch and recorded trips within the Pajaro River to the Santa Maria River location code from 2015-2019.

Year	Wild Released	Hatchery Kept	Hatchery Released	Total Steelhead	Total Trips	Total Hours	Average Hours per Trip	Average Steelhead per Trip
2015	74	1	0	75	177	438	2.47	0.42
2016	94	1	0	95	183	586	3.20	0.52
2017	167	0	2	169	221	683	3.09	0.76
2018	181	1	4	186	202	637	3.15	0.92
2019	89	0	1	90	223	722	3.24	0.40
2015-2019	605	3	7	615	1,006	3,066	3.05	0.61

Table 14. All steelhead catch and recorded trips within the Sacramento River & Tributaries location code from 2015-2019.

Year	Wild Released	Hatchery Kept	Hatchery Released	Total Steelhead	Total Trips	Total Hours	Average Hours per Trip	Average Steelhead per Trip
2015	4,089	105	570	4,764	3,740	18,961	5.07	1.27
2016	2,930	59	478	3,467	2,529	13,674	5.41	1.37
2017	3,271	285	836	4,392	3,804	18,220	4.79	1.15
2018	3,229	247	881	4,357	3,757	18,320	4.88	1.16
2019	2,397	216	908	3,521	3,046	15,398	5.06	1.16
2015-2019	15,916	912	3,673	20,501	16,876	84,573	5.01	1.21

Table 15. All steelhead catch and recorded trips within the Feather River & Tributaries location code from 2015-2019.

Year	Wild Released	Hatchery Kept	Hatchery Released	Total Steelhead	Total Trips	Total Hours	Average Hours per Trip	Average Steelhead per Trip
2015	1,151	76	469	1,696	2,200	8,446	3.84	0.77
2016	783	90	374	1,247	1,486	5,930	3.99	0.84
2017	1,831	528	2,027	4,386	3,148	12,107	3.85	1.39
2018	1,512	543	2,145	4,200	3,162	11,598	3.67	1.33
2019	1,101	391	1,382	2,874	2,561	9,513	3.71	1.12
2015-2019	6,378	1,628	6,397	14,403	12,557	47,594	3.79	1.15

Table 16. All steelhead catch and recorded trips within the Yuba River & Tributaries location code from 2015-2019.

Year	Wild Released	Hatchery Kept	Hatchery Released	Total Steelhead	Total Trips	Total Hours	Average Hours per Trip	Average Steelhead per Trip
2015	875	5	77	957	1,240	5,292	4.27	0.77
2016	386	4	37	427	535	2,278	4.26	0.80
2017	386	3	64	453	846	3,365	3.98	0.54
2018	506	3	49	558	928	3,620	3.90	0.60
2019	709	7	43	759	859	3,713	4.32	0.88
2015-2019	2,862	22	270	3,154	4,408	18,268	4.14	0.72

Table 17. All steelhead catch and recorded trips within the American River & Tributaries location code from 2015-2019.

Year	Wild Released	Hatchery Kept	Hatchery Released	Total Steelhead	Total Trips	Total Hours	Average Hours per Trip	Average Steelhead per Trip
2015	324	360	1,065	1,749	4,108	14,766	3.59	0.43
2016	300	207	671	1,178	2,360	7,939	3.36	0.50
2017	727	283	835	1,845	4,123	13,967	3.39	0.45
2018	865	254	935	2,054	3,982	13,414	3.37	0.52
2019	602	381	1,231	2,214	4,074	14,068	3.45	0.54
2015-2019	2,818	1,485	4,737	9,040	18,647	64,154	3.44	0.48

Table 18. All steelhead catch and recorded trips within the Mokelumne River & Tributaries location code from 2015-2019.

Year	Wild Released	Hatchery Kept	Hatchery Released	Total Steelhead	Total Trips	Total Hours	Average Hours per Trip	Average Steelhead per Trip
2015	331	23	99	453	480	1,927	4.01	0.94
2016	138	12	68	218	212	816	3.85	1.03
2017	615	30	367	1,012	675	2,732	4.05	1.50
2018	516	26	230	772	736	2,894	3.93	1.05
2019	297	7	76	380	400	1,569	3.92	0.95
2015-2019	1,897	98	840	2,835	2,503	9,938	3.97	1.13

Table 19. All steelhead catch and recorded trips within the San Joaquin River & Tributaries location code from 2015-2019.

Year	Wild Released	Hatchery Kept	Hatchery Released	Total Steelhead	Total Trips	Total Hours	Average Hours per Trip	Average Steelhead per Trip
2015	60	0	37	97	302	1,335	4.42	0.32
2016	118	3	4	125	248	995	4.01	0.50
2017	220	0	48	268	385	1,566	4.07	0.70
2018	214	3	29	246	425	1,815	4.27	0.58
2019	209	7	12	228	348	1,411	4.05	0.66
2015-2019	821	13	130	964	1,708	7,122	4.17	0.56

Table 20. All steelhead catch and recorded trips within all location codes from 2015 to 2019.

Year	Wild Released	Hatchery Kept	Hatchery Released	Total Steelhead	Total Trips	Total Hours	Average Hours per Trip	Average Steelhead per Trip
2015	24,791	2,987	7,267	35,045	43,689	190,958	4.37	0.80
2016	14,078	1,199	3,927	19,204	29,943	131,349	4.39	0.64
2017	22,097	2,841	8,125	33,063	41,101	170,691	4.15	0.80
2018	27,199	2,575	7,751	37,525	41,601	171,769	4.13	0.90
2019	21,188	1,841	6,252	29,981	34,464	142,979	4.15	0.87
2015-2019	110,053	11,443	33,322	154,818	190,798	807,746	4.23	0.81